IN THE CLAIMS:

1. (Currently amended) A ~~eukaryotic~~ mammalian cell comprising:

a first recombinant gene encoding a chimeric receptor;

a second recombinant gene encoding a compound the expression of which creates an autocrinic or anti-autocrinic loop; and

a reporter system that is activated or inactivated upon the creation of said autocrinic or anti-autocrinic loop.

2. (Canceled).

3. (Currently amended) The ~~eukaryotic~~ mammalian cell of claim 1, wherein the chimeric receptor is a multimeric or multimerizing receptor.

4. (Currently amended) The ~~eukaryotic~~ mammalian cell of claim 1, wherein said second recombinant gene is functionally incorporated after a constitutive promoter.

5. (Currently amended) The ~~eukaryotic~~ mammalian cell of claim 1, wherein said reporter system is activated as a result of a ligand binding to said chimeric receptor.

6. (Currently amended) The ~~eukaryotic~~ mammalian cell of claim 1, wherein a cytoplasmic part of the chimeric receptor is a cytoplasmic part of at least one interferon receptor subunit.

7. (Currently amended) The ~~eukaryotic~~ mammalian cell of claim 1, wherein the reporter system comprises *E. coli* xanthine-guanine phosphoribosyl transferase (gpt).

8. (Currently amended) The ~~eukaryotic~~ mammalian cell of claim 7, wherein said reporter system is placed under control of a 6-16 reporter.

9. (Currently amended) The ~~eukaryotic~~ mammalian cell of claim 4, wherein said second recombinant gene is inserted after an SRa or HEF1a promoter.

10. (Currently amended) The ~~eukaryotic~~ mammalian cell of claim 1, wherein the cell is a 2fTGH cell.

11. (Currently amended) A method of screening for a compound that inhibits the binding of a ligand with the extracellular part of a chimeric receptor and/or ~~with~~ inhibits the signaling pathway of the cytoplasmic part of a chimeric receptor, the method comprising:
providing the ~~eukaryotic~~ mammalian cell of claim 1;
contacting said ~~eukaryotic~~ mammalian cell with said compound and said ligand; and
selecting cells in which the cell's reporter system is inactivated;
thus screening for the compound that inhibits the binding of the ligand with the extracellular part of the chimeric receptor ~~or with~~ and/or inhibits the signaling pathway of the cytoplasmic part of the chimeric receptor.

12-13. Canceled.

14. (Currently amended) A kit, comprising a ~~eukaryotic~~ mammalian host cell and one or more transformation vectors, which upon the transfection of said cell with said vector or vectors, results in the ~~eukaryotic~~ mammalian cell of claim 1.

15. (Currently amended) A method of screening for ~~ligands~~ agonists of ~~an orphan~~ a chimeric receptor, the method comprising:

providing a ~~eukaryotic~~ mammalian cell comprising:

a first recombinant gene encoding a chimeric receptor;

a library of recombinant genes encoding at least one compound, the expression of which creates an autocrinic loop;

a reporter system that is activated upon the creation of said autocrinic loop;

selecting cells in which the cell's reporter system is activated; and

identifying the ~~ligand corresponding to the~~ at least one compound that binds to said chimeric receptor and activated said autocrinic loop;

thus screening for the ~~ligands~~ agonists of ~~an~~ the ~~orphan~~ chimeric receptor.

16. (Currently amended) The method according to claim 24 wherein said ~~series of compounds comprise~~ ligand comprises a ~~genes~~ gene encoding said antagonists.

17. Canceled.

18. (Currently amended) The method according to claim 15, wherein said ~~ligands~~ agonists are produced by the autocrinic loop.

19-20. Canceled.

21. (Currently amended) The ~~eukaryotic~~ mammalian cell of claim [[2]] 1, wherein the chimeric receptor is a multimeric or multimerizing receptor.

22. (Currently amended) The ~~eukaryotic~~ mammalian cell of claim [[2]] 1, wherein said second recombinant gene is functionally incorporated after a constitutive promoter.

23. (Currently amended) The ~~eukaryotic~~ mammalian cell of claim [[2]] 1, wherein said reporter system is activated as a result of a ligand binding to said chimeric receptor.

24. (Currently amended) A method of screening for antagonists ~~inhibiting ligand-receptor binding~~ of a chimeric receptor, the method comprising:

providing a ~~eukaryotic~~ mammalian cell comprising:

a first recombinant gene encoding a chimeric receptor;

a second recombinant gene encoding a compound, the expression of which creates an autocrinic loop;

a reporter system that is activated upon the creation of said autocrinic loop;

~~reacting~~ contacting ~~a series of compounds~~ the compound with said chimeric receptor in the presence of a ligand of the chimeric receptor ~~eukaryotic cell~~;

~~assaying the inhibiting activity of the ligand-receptor binding of each element of said series of compounds by assaying~~ determining the ability of the compound to ~~the deactivation of~~ activate the reporter system; and

comparing the ability of the compound to activate the reporter system to a positive or a negative control; ~~and~~

~~based on said~~ thereby identifying the ~~deactivation, determining the presence of an~~ antagonist of the chimeric receptor.

25. (Currently amended) A method of screening for antagonists ~~inhibiting ligand-receptor binding~~ of a chimeric receptor, the method comprising:

providing a ~~eukaryotic~~ mammalian cell comprising:

a first recombinant gene encoding a chimeric receptor;

a second recombinant gene encoding a compound, the expression of which creates an anti-autocrinic loop;

a reporter system that is deactivated upon the creation of said anti-autocrinic loop;

contacting the compound with said chimeric receptor in the presence of a ligand of the chimeric receptor;

assaying the inhibiting activity of the ligand-receptor binding by assaying the activation of the reporter system;

comparing the inhibiting activity of said series of compounds to a positive or a negative control; and

determining the presence of an antagonist that creates said anti-autocrinic loop by scoring the deactivation of the reporter.